WHAT IS CLAIMED IS:

1. A method of manufacturing a Group III nitride substrate, comprising, in an atmosphere including nitrogen, allowing a Group III element and the nitrogen to react with each other in an alkali metal melt to cause generation and growth of Group III nitride crystals,

wherein a plurality of portions of a Group III nitride semiconductor layer are prepared, selected as seed crystals, and used for at least one of the generation and the growth of the Group III nitride crystals, and then surfaces of the seed crystals are brought into contact with the alkali metal melt.

2. The method of manufacturing a Group III nitride substrate according to claim 1, comprising:

(i) preparing a Group III nitride semiconductor layer that is expressed by a composition formula of $Al_uGa_vIn_{1-u-v}N$ (where $0 \leq u \leq 1$, $0 \leq v \leq 1$, and $u + v \leq 1$);

(ii) forming a patterned mask film on the Group III nitride semiconductor layer; and

(iii) in an atmosphere including nitrogen, bringing a surface of the Group III nitride semiconductor layer into contact with a melt containing the nitrogen, alkali metal, and at least one Group III element selected from the group consisting of gallium, aluminum, and indium, and thereby growing Group III nitride crystals on the Group III nitride semiconductor layer, with portions of the Group III nitride semiconductor layer that are not covered with the mask film serving as seed crystals.

3. The method of manufacturing a Group III nitride substrate according to claim 2, wherein the mask film comprises diamond-like carbon.

4. The method of manufacturing a Group III nitride substrate according to claim 2, wherein the mask film is expressed by a composition formula of $Al_uGa_{1-u}N$ (where $0 \leq u \leq 1$).

5. The method of manufacturing a Group III nitride substrate according to claim 2, wherein a composition ratio of Al contained in the mask film is higher than that of Al contained in the Group III nitride

semiconductor layer.

6. The method of manufacturing a Group III nitride substrate according to claim 5, wherein a surface of the mask film or the mask film as a whole has been oxidized.

7. The method of manufacturing a Group III nitride substrate according to claim 2, wherein the process (i) comprises:

forming, on a base substrate, a Group III nitride semiconductor layer that is expressed by a composition formula of $Al_uGa_vIn_{1-u-v}N$ (where $0 \leq u \leq 1$, $0 \leq v \leq 1$, and $u + v \leq 1$).

8. The method of manufacturing a Group III nitride substrate according to claim 2, wherein the Group III nitride semiconductor layer is formed using GaN, and the mask film is expressed by a composition formula of $Al_uGa_{1-u}N$ (where $0.05 \leq u \leq 1$).

9. The method of manufacturing a Group III nitride substrate according to claim 2, wherein the mask film has a plurality of through holes formed therein, the portions of the Group III nitride semiconductor layer are exposed through the through holes.

10. The method of manufacturing a Group III nitride substrate according to claim 2, wherein the mask film is patterned into stripes, and thereby stripe-like portions of the Group III nitride semiconductor layer are exposed.

11. The method of manufacturing a Group III nitride substrate according to claim 2, wherein the mask film is formed using Al, and a surface of the mask film or the mask film as a whole has been oxidized.

12. The method of manufacturing a Group III nitride substrate according to claim 1, comprising:

(I) forming a patterned mask film on a base substrate;

(II) forming a Group III nitride semiconductor layer on portions of the base substrate that are not covered with the mask film, the Group III nitride semiconductor layer being expressed by a composition formula of

$Al_uGa_vIn_{1-u-v}N$ (where $0 \leq u \leq 1$, $0 \leq v \leq 1$, and $u + v \leq 1$); and

(III) in an atmosphere including nitrogen, bringing a surface of the Group III nitride semiconductor layer into contact with a melt containing the nitrogen, alkali metal, and at least one Group III element selected from the group consisting of gallium, aluminum, and indium, and thereby growing Group III nitride crystals on the Group III nitride semiconductor layer, with the Group III nitride semiconductor layer serving as seed crystals.

13. The method of manufacturing a Group III nitride substrate according to claim 12, wherein the mask film has a plurality of through holes formed therein, the portions of the Group III nitride semiconductor layer are exposed through the through holes.

14. The method of manufacturing a Group III nitride substrate according to claim 12, wherein the mask film is patterned into stripes, and thereby stripe-like portions of the Group III nitride semiconductor layer are exposed.

15. The method of manufacturing a Group III nitride substrate according to claim 12, wherein the mask film comprises at least one selected from the group consisting of silicon nitride, silicon oxide, silicon nitride oxide, aluminum oxide, and aluminum nitride oxide.

16. The method of manufacturing a Group III nitride substrate according to claim 12, wherein the mask film comprises at least one of high melting metal or a high melting metallized material.

17. The method of manufacturing a Group III nitride substrate according to claim 12, wherein the mask film comprises at least one selected from the group consisting of titanium, tungsten, molybdenum, niobium, tungsten silicide, molybdenum silicide, and niobium silicide.

18. The method of manufacturing a Group III nitride substrate according to claim 1, comprising:

(A) preparing a Group III nitride semiconductor layer that is expressed by a composition formula of $Al_uGa_vIn_{1-u-v}N$ (where $0 \leq u \leq 1$, $0 \leq v$

$\leq 1$, and $u + v \leq 1$);

(B) oxidizing portions of a surface of the Group III nitride semiconductor layer to form oxidized regions; and

(C) in an atmosphere including nitrogen, bringing the surface of the Group III nitride semiconductor layer into contact with a melt containing the nitrogen, alkali metal, and at least one Group III element selected from the group consisting of gallium, aluminum, and indium, and thereby growing Group III nitride crystals on the Group III nitride semiconductor layer, with portions other than the oxidized regions of the Group III nitride semiconductor layer serving as seed crystals.

19. The method of manufacturing a Group III nitride substrate according to claim 18, wherein the process (A) comprises:

forming, on a base substrate, a Group III nitride semiconductor layer that is expressed by a composition formula of $Al_uGa_vIn_{1-u-v}N$ (where $0 \leq u \leq 1$, $0 \leq v \leq 1$, and $u + v \leq 1$).

20. The method of manufacturing a Group III nitride substrate according to claim 18, wherein the process (B) comprises:

(B-1) forming a patterned mask film on the surface of the Group III nitride semiconductor layer;

(B-2) oxidizing portions of the surface of the Group III nitride semiconductor layer to form the oxidized regions, the portions being not covered with the mask film.

21. The method of manufacturing a Group III nitride substrate according to claim 20, wherein the process (B-2) comprises:

implanting oxygen in the portions of the surface of the Group III nitride semiconductor layer to form the oxidized regions, the portions being not covered with the mask film.

22 The method of manufacturing a Group III nitride substrate according to claim 20, wherein the mask film has a plurality of through holes formed therein, the portions of the Group III nitride semiconductor layer are exposed through the through holes.

23. The method of manufacturing a Group III nitride substrate

according to claim 20, wherein the mask film is patterned into stripes, and thereby stripe-like portions of the Group III nitride semiconductor layer are exposed.

24. The method of manufacturing a Group III nitride substrate according to claim 20, comprising the step of removing the mask film.

25. The method of manufacturing a Group III nitride substrate according to claim 1, comprising:

(a) forming, on a base substrate, a Group III nitride semiconductor layer that is expressed by a composition formula of $Al_uGa_vIn_{1-u-v}N$ (where $0 \leq u \leq 1$, $0 \leq v \leq 1$, and $u + v \leq 1$);

(b) forming a patterned mask film on the Group III nitride semiconductor layer, removing portions of the Group III nitride semiconductor layer located in regions that are not covered with the mask film, to expose portions of the base substrate and to form seed semiconductor layers with a convex shape that are covered with the mask film; and

(c) in an atmosphere including nitrogen, bringing surfaces of the seed semiconductor layers into contact with a melt containing the nitrogen, alkali metal, and at least one Group III element selected from the group consisting of gallium, aluminum, and indium, and thereby growing Group III nitride crystals on the Group III nitride semiconductor layer, with the seed semiconductor layers serving as seed crystals.

26. The method of manufacturing a Group III nitride substrate according to claim 25, wherein the base substrate is a sapphire substrate whose surface is a (0001) plane.

27. The method of manufacturing a Group III nitride substrate according to claim 25, wherein the mask film has a plurality of through holes formed therein, the portions of the Group III nitride semiconductor layer are exposed through the through holes.

28. The method of manufacturing a Group III nitride substrate according to claim 25, wherein the mask film is patterned into stripes, and thereby stripe-like portions of the Group III nitride semiconductor layer are

exposed.

29. The method of manufacturing a Group III nitride substrate according to claim 25, comprising the step of removing the mask film.

30. The method of manufacturing a Group III nitride substrate according to claim 1, wherein the Group III element is gallium, and the Group III nitride crystals are crystals of gallium nitride.

31. The method of manufacturing a Group III nitride substrate according to claim 1, wherein the atmosphere is a pressurized atmosphere.

32. The method of manufacturing a Group III nitride substrate according to claim 1, wherein the melt further comprises alkaline-earth metal.

33. The method of manufacturing a Group III nitride substrate according to claim 1, wherein the Group III nitride crystals are grown while the seed crystals is rocked in the melt.

34. The method of manufacturing a Group III nitride substrate according to claim 1, wherein a cycle of portions of a Group III nitride semiconductor layer are selected as seed crystals is at least 30 μm.

35. The method of manufacturing a Group III nitride substrate according to claim 1, wherein a cycle of portions of a Group III nitride semiconductor layer are selected as seed crystals is at least 50 μm.

36. The method of manufacturing a Group III nitride substrate according to claim 1, wherein a cycle of portions of a Group III nitride semiconductor layer are selected as seed crystals is at least 100 μm.

37. The method of manufacturing a Group III nitride substrate according to claim 1, wherein a cycle of portions of a Group III nitride semiconductor layer are selected as seed crystals is at least 1000 μm.

38. A Group III nitride substrate that is manufactured by a

manufacturing method according to claim 1.

39. The Group III nitride substrate according to claim 38, wherein a cycle of dense dislocation areas is at least 30 μm.

40. The Group III nitride substrate according to claim 38, wherein a cycle of dense dislocation areas is at least 50 μm.

41. The Group III nitride substrate according to claim 38, wherein a cycle of dense dislocation areas is at least 100 μm.

42. The Group III nitride substrate according to claim 38, wherein a cycle of dense dislocation areas is at least 1000 μm.

43. The Group III nitride substrate according to claim 38, comprising:

a Group III nitride semiconductor layer having oxidized regions in its portions; and

Group III nitride crystals formed on the Group III nitride semiconductor layer through liquid phase growth,

wherein the oxidized regions are the oxidized regions formed in the portions by the process (B) according to claim 19.

44. The Group III nitride substrate according to claim 38, comprising:

a Group III nitride semiconductor layer including at least one of a region formed of AlGaN and a region formed of AlN, in its portions; and

Group III nitride crystals formed on the Group III nitride semiconductor layer through liquid phase growth.

45. The Group III nitride substrate according to claim 38, comprising:

a Group III nitride semiconductor layer including diamond-like carbon; and

Group III nitride crystals formed on the Group III nitride semiconductor layer through liquid phase growth.

46. A semiconductor device, comprising:

a substrate: and

a semiconductor element formed on the substrate,

wherein the substrate is a Group III nitride substrate according to claim 38.

47. The semiconductor device according to claim 46, wherein the semiconductor element is a laser diode or a light emitting diode.